Amendments to the Abstract

Please amend the Abstract, as shown below:

A coreless AC linear motor, including rows of field magnets (31, 32)a magnet assembly forming a magnetic gap (3), and a can, the can further including a coil housing section forming a deep groove. The motor also includes a plurality of coreless coils (5)inserted into the deep groove and arranged in a straight line ininside the magnetic gap, a can (10) for housing the coreless coils, and a and a cover body (11) for for sealing up the can. The can includes a coil housing section (10F) having a deep groove (10B), and a flange section (10A) joined to the cover body. The deep groove is formed by gouging out material formed from stainless steel using an end mill, a drill, and an electric discharge machining electrode. After inserting the coreless coils into the deep groove, the coreless coils are fixed to the can using resin or adhesive (6). An O-ring (12) for sealing between the can and the cover body in an air-tight manner is provided, and a seat (10C) for receiving the O-ring is formed in the flange section. the can.